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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/089,040	04/16/2002	Yoshio Umezawa	2002-0426A	9569

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EXAMINER

MOORE, WILLIAM W

ART UNIT PAPER NUMBER

1652

DATE MAILED: 10/06/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 10/089,040	Applicant(s) UMEZAWA ET AL.	
	Examiner William W. Moore	Art Unit 1652	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-11 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-11 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on ____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. ____.
 3. ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|--|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. ____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date ____ | 6) <input type="checkbox"/> Other: ____ |

DETAILED ACTION

Response to Amendment

Applicant's preliminary Amendment filed April 16, 2004, has been entered, perfecting a claim to priority under 35 U.S.C. §§ 119(a)-(d) and correcting obvious errors in paragraphs at pages 7, 9 and 12 of the specification as well as amending claims 4-6, 8, 10 and 11 to remove improper multiple dependencies. Claims 1-11 are pending and examined herein.

Specification

The disclosure is objected to because of the following informalities: 35 U.S.C. § 112, first paragraph, requires the specification to be written in "full, clear, concise, and exact terms." The specification is replete with terms which are not clear, concise and exact. The specification should be revised carefully in order to comply with 35 U.S.C. § 112, first paragraph. Examples of some unclear, inexact or verbose terms used in the specification are: None among the second and third paragraphs at page 5, the second and third full paragraphs at page 10, the first two paragraphs at page 11, the paragraph spanning pages 13 and 14 and the following paragraph at page 14, provide any structural basis for determination of the orientation of the amino acid sequences in any component of a "probe". A paragraph spanning pages 11-12 erroneously suggests that endonucleases associated with inteins somehow facilitate "automatic . . . excision". The term "m125" appearing at lines 15 and 20 of page 17 is not explained. The second paragraph at page 18 does not provide any structural basis for determination of the orientation of the nucleic acid components of a plasmid the "covers" a "VDE" region. It is not clear the disclosure provides a basis for claims defining the structural relationships of components of "probes" of the pending claims 1-9 required for practice of methods of claims 10 and 11. Correction or clarification is required.

Claim Objections

Claim 11 is objected to because of the following informalities: Use of the present tense of the verb "to link" at the close of line 2 of the claim is grammatically incorrect. Appropriate correction is required.

Claim Rejections - 35 USC § 112

The following is a quotation of the second paragraph of 35 U.S.C. § 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 1-11 are rejected under 35 U.S.C. § 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claims 1-3 are indefinite in failing to describe any structural relationship, or orientation, for components of a "probe" so that the public and the artisan seeking to determine the metes and bounds of the intended subject matter can recognize the structure of the "probe" or the organization of its components. It is not clear, for instance, whether or not Applicant intends that separate portions of a split intein, or two separate and integral inteins, are to be comprised in a "probe". Claims 4-11 are included in this rejection because they depend from claims 1 and 2 but fail to resolve the ambiguities of the claims from which they depend. Claim 4 is independently indefinite because it erroneously recites, "the intein is an endonuclease derived from yeast VMA", misstating the intended subject matter where the *S. cerevisiae* VMA intein is not an endonuclease; instead, the yeast VMA intein comprises an endonuclease domain Applicant removed in forming two "split" inteins according to the specification.

Claim 10 is independently indefinite because the method it describes is incomplete because "making" a "probe a" and a "probe b" "coexist in a system" has no clear relationship with the purpose stated in the claim preamble, "analyzing protein-protein interaction". Claim 11 is included in this rejection of claim 10 because it fails to resolve the ambiguities of the claim from which it depends.

Conclusion

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Any inquiry concerning this communication or earlier communications from the examiner should be directed to William W. Moore whose telephone number is now 571.272.0933. The examiner can normally be reached between 9:00AM and 5:30PM EST. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Ponnathapura Achutamurthy, can now be reached at 571.272.0928. The fax phone numbers for all communications for the organization where this application or proceeding is assigned remains 703.872.9306. Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is now 571.272.1600.

William W. Moore
September 30, 2004

